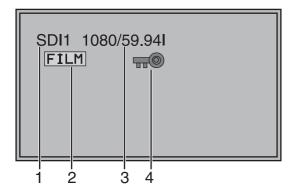
# **Panasonic Broadcast**

# BT-LT2600 Menu Information

# How to Use the On Screen Menu

Six types of information are displayed on the screen. The input signal status, picture adjusting knob status, sharpness display, function display, audio level meter display and the menu display.

# Input signal status



# 1. The selected input line (→ page 9, 2)

- VIDEO, Y/C, SDI1, SDI2, YPBPR/RGB-VIDEO/RGB-COMP.
- 2. Various display (FILM mode)
  - Displayed when "FILM" is selected in "GAMMA SELECT".

#### 3. Signal format

- The display status can be set in "STATUS DISPLAY" in the "SYSTEM CONFIG" menu (→ page 21).
- If "UNSUPPORT SIGNAL" is displayed, then either the current input signal is not supported or the "INPUT SELECT" menu setting needs to be changed.
- When "NO SIGNAL" is displayed, there is no input signal.

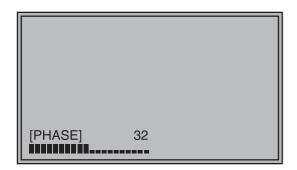
#### 4. Various display (lock setting)

• Displayed when control lock is ON.

#### Note:

"UNSUPPORT SIGNAL" and "NO SIGNAL" may not be displayed correctly.

## Picture adjusting knob status



# Picture adjusting knob (→ page 9, 5)

- This knob can be rotated and pushed.
- The status display appears when the knob is pushed.

The display disappears when the knob is pushed again, or if the knob is not operated for 10 seconds.

- Settings can only be adjusted in the status display.
- The display position can be changed (→ page 21 "ROTARY POSITION").

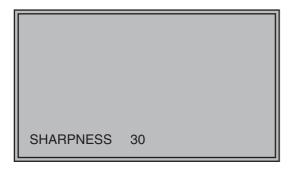
Status display:

PHASE, CHROMA, BRIGHT, CONTRAST or BACKLIGHT

#### Note:

The volume knob status display is not displayed on the screen.

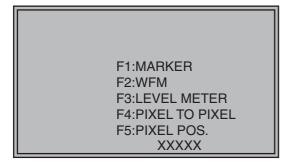
# Sharpness display



- · Sharpness is displayed when it is set.
- The display disappears if remains idle for 2 minutes.

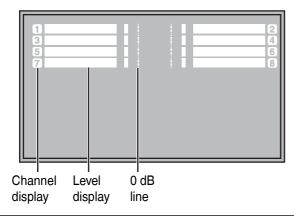
# How to Use the On Screen Menu (continued)

# **Function display**



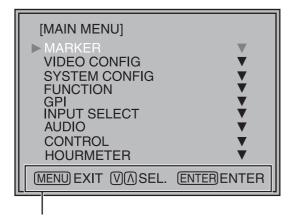
- You can set FUNCTION display in the menu.
- When "FUNCTION DISPLAY" (→ page 22) is "ON" and either [FUNCTION1] or [FUNCTION5] is pressed, the unit displays the status of the FUNCTION item set.
- The display disappears if remains idle for 2 seconds.
- The operational status is displayed in "XXXXX" (→ page 23 "Operation items displayed when a FUNCTION button is used").

# Audio level meter display



- When the signal is SDI, the audio level is displayed on the white skeleton bar meter.
- You can switch the level display on and off, and set the number of displayed channels using the menu.
- The 0 dB line and channel display can be switched on and off from the menu.

# Menu display



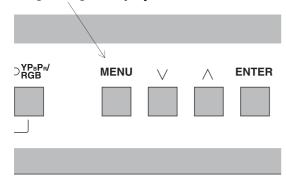
Displays the operation explanation for the menu button.

- This is displayed when the menu is used.
- The display disappears if remains idle for 2 minutes.
- The display position can be changed (→ page 21 "MENU POSITION").

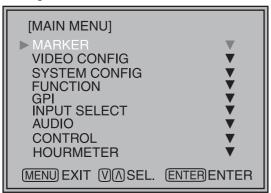
# How to Use the On Screen Menu (continued)

#### Menu operations

1. Push [MENU] to display the MAIN menu.

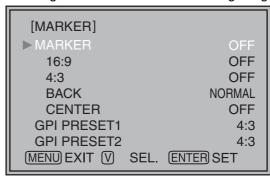


2. Push  $[\lor, \land]$  to select the menu, then push [ENTER].



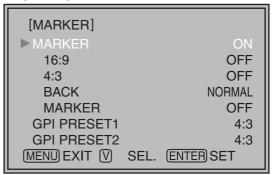
3. Push  $[\lor, \land]$  to select the sub menu, then push [ENTER].

The setting values in the sub menu change to green.



4. Push  $[\lor, \land]$  to select the setting values, then push [ENTER].

Push [MENU] to cancel.



To return to the previous screen

Push [MENU].

# **User Data**

You can change the menu setting values and picture adjusting knob settings, then save and load up to 5 combinations of screen adjustment values as user data. You can also return the setting values and adjustment values to the factory preset settings.

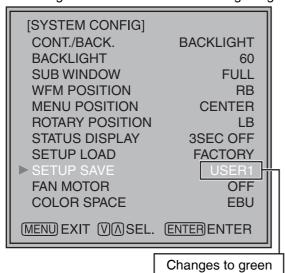
The following settings are included in user data.

- Menu settings except for "SETUP LOAD/SAVE" (including the button function settings on the front of the monitor)
- Screen adjustment values changed in picture adjusting knob

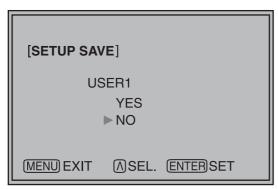
#### Saving user data

- 1. Push [MENU] to display the MAIN menu.
- 2. Push  $[\lor, \land]$  to select the "SYSTEM CONFIG" menu and push [ENTER].
- 3. Push [ $\bigvee$ ,  $\bigwedge$ ] to select the "SETUP SAVE" sub menu and push [ENTER].

The setting values in the sub menu change to green.



 Push [ ∨, ∧] to select the file you wish to save to from "USER1" – "USER5", then push [ENTER]. The following screen appears.



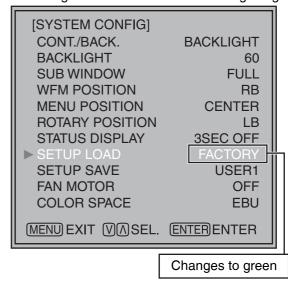
5. Select "YES", and push [ENTER].

The user data is saved.

# Loading user data

- 1. Push [MENU] to display the MAIN menu.
- 2. Push  $[\lor, \land]$  to select the "SYSTEM CONFIG" menu and push [ENTER].
- 3. Push  $[\lor, \land]$  to select the "SETUP LOAD" submenu and push [ENTER].

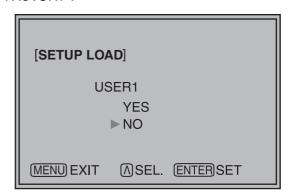
The setting values in the sub menu change to green.



4. Push [∨, ∧] to select the file you wish to load to from "USER1" – "USER5", then push [ENTER].

The following screen appears.

To return to the factory preset setting values, select "FACTORY".

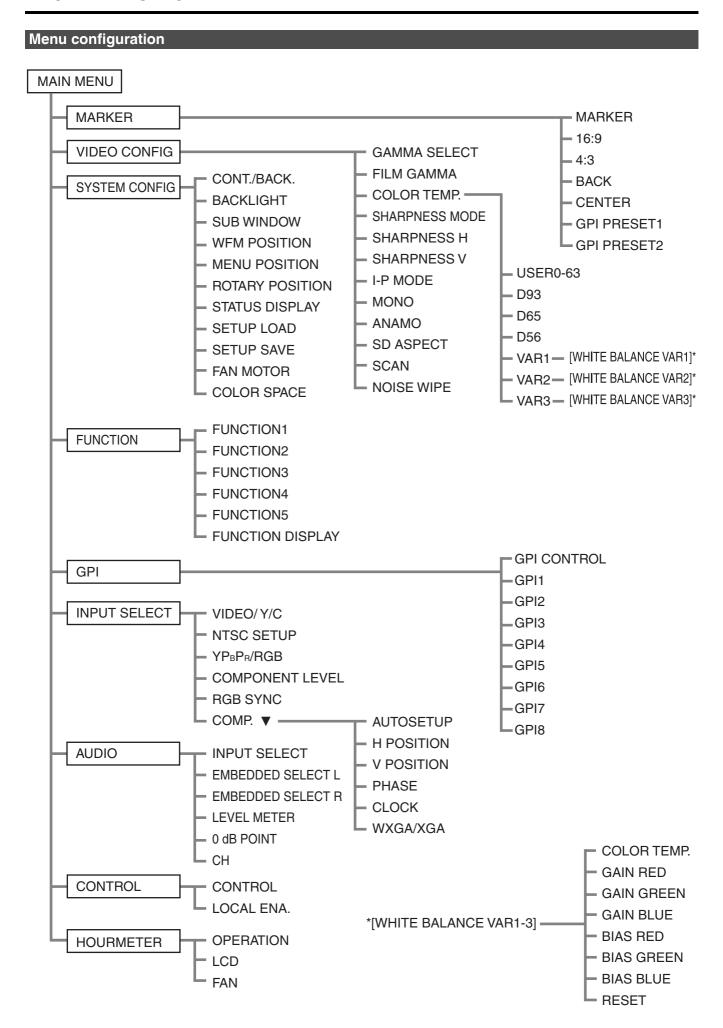


5. Select "YES", and push [ENTER].

The user data is loaded.

To return to the previous screen Push [MENU].

# Main Menu



# MARKER

Sub menu	Settings	Explanation		
MARKER	<0FF>*1 <0N >	Used to make MARKER settings effective.		
16:9 <sup>*2*3</sup>	<0FF> <4:3 > <13:9> <14:9> <cnsco> <vista> &lt;95%&gt; &lt;93%&gt; &lt;90%&gt; &lt;88%&gt; &lt;80%&gt;</vista></cnsco>	Used to select/display the type of marker when the aspect ratio setting is 16:9. <pre> <off> Marker not displayed. &lt;4:3&gt; 4:3 marker</off></pre>		
<b>4:3</b> *2*4	<0FF> <95%> <93%> <90%> <88%> <80%>	Used to select/display the type of marker when the aspect ratio setting is 4:3. <off> Marker not displayed.  &lt;95%&gt; 95% Area marker &lt;93%&gt; 93% Area marker  &lt;90%&gt; 90% Area marker &lt;88%&gt; 88% Area marker  &lt;80%&gt; 80% Area marker</off>		
BACK*2	<normal> <half> <black></black></half></normal>	Used to select the background brightness excluding the marker. <normal> Normal background  <half> Background brightness 50%  <black> Background brightness 0% (Black)</black></half></normal>		
CENTER*2	<off> <on></on></off>	Used to display the center marker. <off> Not displayed  <on> Displayed</on></off>		
GPI PRESET1*5	<4:3> <13:9> <14:9> <cnsco> <vista></vista></cnsco>	GPI PRESET1: Used to select the marker to be displayed using the GPI terminal "MARKER1 ON/OFF" operation (→ page 30).  GPI PRESET2: Used to select the marker to be displayed using the GPI terminal "MARKER2 ON/OFF" operation (→ page 30).		
GPI PRESET2*5	<95% (16:9)> <93% (16:9)> <90% (16:9)> <88% (16:9)> <80% (16:9)> <95% (4:3)> <93% (4:3)> <90% (4:3)> <88% (4:3)> <80% (4:3)>	<4:3> 4:3 marker <13:9> 13:9 marker <14:9> 14:9 marker <cnsco> CNSCO marker <vista> VISTA marker &lt;95% (16:9)&gt; 95% Area marker when the aspect ratio is 16:9. &lt;93% (16:9)&gt; 93% Area marker when the aspect ratio is 16:9. &lt;90% (16:9)&gt; 90% Area marker when the aspect ratio is 16:9. &lt;88% (16:9)&gt; 88% Area marker when the aspect ratio is 16:9. &lt;80% (16:9)&gt; 80% Area marker when the aspect ratio is 16:9. &lt;95% (4:3)&gt; 95% Area marker when the aspect ratio is 4:3. &lt;93% (4:3)&gt; 93% Area marker when the aspect ratio is 4:3. &lt;90% (4:3)&gt; 90% Area marker when the aspect ratio is 4:3. &lt;88% (4:3)&gt; 88% Area marker when the aspect ratio is 4:3. &lt;80% (4:3)&gt; 80% Area marker when the aspect ratio is 4:3.</vista></cnsco>		

<sup>\*1</sup> The setting becomes "On" when the unit receives marker-related control during REMOTE operation. (Priority goes to GPI when GPI settings exist.)

<sup>\*2</sup> When controlling the marker settings using the GPI function (→ page 30), these settings become disabled. These are not operated when the 2 screens are displayed.

<sup>\*3</sup> These are only enabled when the HD signal and SD signal aspect ratio settings are 16:9.

<sup>\*4</sup> These are only enabled when the SD signal aspect ratio setting is 4:3.

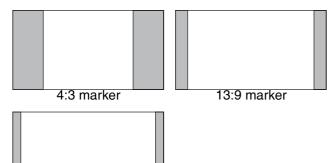
<sup>\*5</sup> When setting "GPI PRESET1" or "GPI PRESET2" using GPI function, the REMOTE function depending RC-232C becomes disabled (error response: ER001).

# Types of MARKER

#### ■ 16:9 marker

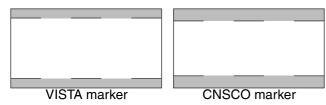
(Displayed when using HD, or when using SD with a 16:9 aspect ratio)

The marker is only displayed as a vertical bar. In addition, the section becomes the "MARKER BACK" item.

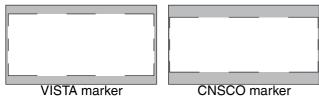


14:9 marker **VISTA** marker, CNSCO marker

A horizontal dotted line is displayed as the marker.

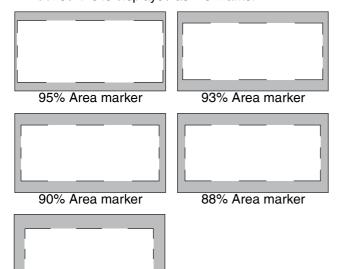


When "UNDER" is set in "SCAN" in the "VIDEO CONFIG" menu, a vertical dotted line is also displayed as the marker.



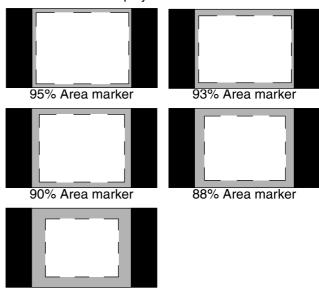
## Area marker

A dotted line is displayed as the marker.



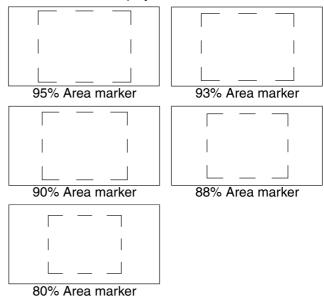
#### ■ 4:3 marker

(Displayed when using SD with a 4:3 aspect ratio) A dotted line is displayed as the marker.



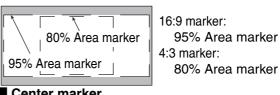
80% Area marker

(Displayed when using HD, or when using SD with a 16:9 aspect ratio) A dotted line is displayed as the marker.

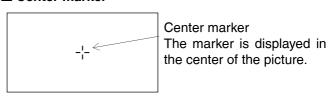


# \*You can display 4:3 marker at the same time as 16:9 marker. Simultaneously display example

The section becomes the "MARKER BACK" item. The background selected with the 16:9 marker is controlled.



# Center marker



80% Area marker

# **VIDEO CONFIG**

Sub menu	Settings	Explanation	
GAMMA SELECT*1*2	<pre><standard> <film> <stdio pst=""></stdio></film></standard></pre>	Used to select the gamma curve. <standard>Standard mode <film>FILM mode  <stdio pst="">Color emphasis mode (in the gamma characteristic in which shades are valued more than the contrasts, it is suitable for use by the studio and the post production, etc.)  When FILM is selected, FILM mark is displayed in the top left of the screen.</stdio></film></standard>	
FILM GAMMA <sup>*2</sup>	< <u><varicam></varicam></u>	Used to select the type of FILM gamma mode. <varicam> VARICAM use  <other> When using other types than VARICAM</other></varicam>	
COLOR TEMP.	<user0-63>*5 <d93> &lt;<u>D65&gt;</u> <d56> <var1> <var2> <var3></var3></var2></var1></d56></d93></user0-63>	Used to select the color temperature. <user0-63> Adjustable settings 0-63 (color temperature around 3000K-9300K)  <d93> Color temperature around 9300K  <d65> Color temperature around 6500K  <d56> Color temperature around 5600K  <var1> WB adjustment mode*4  <var3> WB adjustment mode*4</var3></var1></d56></d65></d93></user0-63>	
SHARPNESS MODE*2	<high><sup>*3</sup> <low></low></high>	Used to select the width of the sharpness edge. <high> Thin edge <low> Thick edge</low></high>	
SHARPNESS H*2	<0–30> *3	Used to set the sharpness in the horizontal direction. When adjusting, the item display moves to the lower part of the screen.	
SHARPNESS V*2	<0–30> *3	Used to set the sharpness in the vertical direction. When adjusting, the item display moves to the lower part of the screen.	
I-P MODE*2*6	<mode2> &lt;<u>MODE1&gt;</u></mode2>	Used to select IP conversion mode. (→ page 20 : About IP Mode) <mode2> Field Interpolation <mode1> Frame Interpolation</mode1></mode2>	
MONO*2	<u><off></off></u> <on></on>	Used to switch between color and monochrome (MONO). <off> Color</off>	
ANAMO*2*7	<u><off></off></u> <on></on>	If an Anamo lens has been used on the camera, and input through SDI 720/60P, 59.94P, the picture is resized to Anamo size magnification. (a vertically compressed signal can be amplified vertically and corrected when it is displayed.)	
SD ASPECT*2	<u>&lt;4:3&gt;</u> <16:9>	Used for setting the aspect ratio settings when using SD signal input. <4:3> 4:3 display <16:9> 16:9 display	
SCAN*2	<normal> <under></under></normal>	Used to set under-scan and normal display. <normal>Normal display <under>Under-scan</under></normal>	
NOISE WIPE*2	<0FF> < <u>ON&gt;</u>	<off> This makes a fluid and smooth contrast obtainable. This is especially effective for continuously changing the contrast of the source signal or CG signal when the S/N is very high. <on> Noise reduction mode. Depending on the camera, this mode can be especially effective for dark scenes. We recommend leaving this setting "ON" under normal conditions.</on></off>	

- 1) Push [ENTER] (USER changes to blue).
- 2) Select 0–63 with  $[\lor, \land]$ , and push [ENTER].
- \*6 When using "SUB WINDOW" function (→ page 24),

  1) change the setting after releasing "SUB WINDOW" function.

  2) we recommand "MODE2" for the image with a fast movement.

<sup>\*1</sup> During 2 screen display, the changes are not reflected in the still image of the main window.
\*2 When "RGB-COMP." is selected in "YP<sub>B</sub>P<sub>R</sub>/RGB" in the "INPUT SELECT" menu (→ page 27), this does not operate.
\*3 The following sharpness values can each be set,

<sup>1)</sup> VIDEO system input line (VIDEO,Y/C)(Factory settings are SHARPNESS MODE : LOW, SHARPNESS H/V : 0)

<sup>2)</sup> any other input line's HD (Factory settings are SHARPNESS MODE : HIGH, SHARPNESS H/V : 0)

<sup>3)</sup> any other input line's SD (Factory settings are SHARPNESS MODE: LOW, SHARPNESS H/V: 0) and the setting values for the selected input signal from within this group is displayed. The adjustment status is

displayed in the bottom right when selected.

\*4 When "VAR1", "VAR2" or "VAR3" is selected, the monitor switches to WB adjustment mode (→ page 20).

<sup>\*5</sup> When selecting USER0-63

<sup>\*7</sup> During Anamo size display, "SCAN" change is not reflected.

#### **About IP Mode**

By selecting "MODE1", you can convert IP through Frame Interpolation.

This unit has reduced the Frame Interpolation delay to 1 field or less, compared to our old models having caused 1 frame delay or more.

Factory preset setting value is "MODE1" recommended for normal use. Depending on images, in very rare cases, noise may occur on the screen. In such a case, "MODE 2" is recommended.

By selecting "MODE2", you can convert IP through Field Interpolation.

Depending on still images, etc., flickers may occur on the screen. In such a case, "MODE 1" is recommended.

## ■ WB adjustment mode

You can adjust "WHITE BALANCE VAR1" - "WHITE BALANCE VAR3" (WB) by selecting "VAR1" - "VAR3" in "COLOR TEMP." in the "VIDEO CONFIG" menu.

Sub menu	Settings	Explanation
COLOR TEMP.*1	<user0-63> <d93> &lt;<u>D65&gt;</u> <d56></d56></d93></user0-63>	Used to select the color temperature that will become the basis for adjustments. <user0-63> Adjustable settings 0-63 (color temperature around 3000K-9300K)  <d93> Color temperature around 9300K  <d65> Color temperature around 6500K  <d56> Color temperature around 5600K</d56></d65></d93></user0-63>
GAIN RED	<0–511>	GAIN elements for RED are adjusted.*2
GAIN GREEN	(Factory presets are values for color temperature <d65>.)</d65>	GAIN elements for GREEN are adjusted.*2
GAIN BLUE	* The presets are values adjusted before shipment from factories.	GAIN elements for BLUE are adjusted.*2
BIAS RED	<-512–511>	BIAS elements for RED are adjusted.*2
BIAS GREEN	(Factory preset settings: 0)	BIAS elements for GREEN are adjusted.*2
BIAS BLUE		BIAS elements for BLUE are adjusted.*2
RESET		"GAIN RED" – "BIAS BLUE" values are reset to color temperatures values selected in "COLOR TEMP.".

<sup>\*1</sup> When "COLOR TEMP." is selected and [ENTER] is pressed following item change, the display changes to the confirmation screen. Selecting "YES" and pressing [ENTER] on this screen return GAIN and BIAS values to the selected color temperature values.

<sup>\*2</sup> When adjusting, the item display moves to the lower part of the screen.

# SYSTEM CONFIG

Sub menu	Settings	Explanation		
CONT./BACK.	<contrast> <backlight></backlight></contrast>	Used to select the function to be assigned to [CONTRAST/BACKLIGHT] (a knob on the front panel). <contrast> Used to adjust CONTRAST.  <backlight> Used to adjust BACKLIGHT.</backlight></contrast>		
BACKLIGHT	< 0- <u>60</u> >	Used to adjust the LCD backlight level.		
SUB WINDOW	< <u>FULL&gt;</u> <part></part>	Used to select the type of sub window. <full>  Used to reduce the whole input signal screen, and arrange it horizontally when it is displayed.  <part>  Used to cut out the central section of the input signal screen, and arrange it horizontally when it is displayed (Displayed at the same size as the previous screen).</part></full>		
WFM POSITION	<lb> <rb> <rt> <lt></lt></rt></rb></lb>	Used to set the WFM display position. <lb> Bottom left of the screen</lb>		
MENU POSITION	<center> <lb> <rb> <rt> <lt></lt></rt></rb></lb></center>	Used to set the on screen menu display position. <center> Center of the screen  <lb> Bottom left of the screen  <rt> Top right of the screen  <lt> Top left of the screen</lt></rt></lb></center>		
POSITION	<center> <lb> <rb> <rt> <lt></lt></rt></rb></lb></center>	Used to set the picture adjusting knob status (on screen menu) display position. <center> Center of the screen  <lb> Bottom left of the screen  <rt> Top right of the screen  <lt> Top left of the screen</lt></rt></lb></center>		
STATUS DISPLAY	<continue> &lt;3SEC OFF&gt; <off></off></continue>	Used to set the input signal status (on screen menu) display status. <continue> Displayed normally.  &lt;3SEC OFF&gt; After changing status, it is displayed for approximately  3 seconds, and then disappears.  <off> Not displayed.</off></continue>		
SETUP LOAD	<pre><factory> <user1> *1*2 <user2> *1*2 <user3> *1*2 <user4> *1*2 <user4> *1*2 <user5> *1*2</user5></user4></user4></user3></user2></user1></factory></pre>	The saved factory preset setting values (FACTORY) or the user data (USER 1–USER 5) are loaded. Also after loading user data, the screen displays the signal selected before loading data.		
SETUP SAVE	<use style="background-color: blue;"> <use are="" load"="" save="" saved.<="" setup="" style="background-color: bl&lt;/th&gt;&lt;th colspan=2&gt;Up to 5 sets of user data can be saved (→ page 15).  The menu settings and picture adjusting knob adjustment values (PHASE /CHROMA /BRIGHT /CONTRAST) excluding " th=""></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use></use>			
FAN MOTOR	<off> &lt;<u>ON&gt;</u></off>	Used to set fan operation. <off> The fan is stopped. The brightness of the backlight automatically lowers.  <on> The fan operates. The backlight brightness returns to normal.</on></off>		
COLOR SPACE	<ebu><sup>*3</sup> <smpte-c><sup>*3</sup></smpte-c></ebu>	Used to set studio-specified colors.		

<sup>\*1</sup> When the monitor is shipped from the factory, "USER1" – "USER5" and "FACTORY" all have the same details.

<sup>\*2</sup> You cannot save or load the settings for "H POSITION", "V POSITION", "PHASE" and "CLOCK" (→ page 27).

<sup>\*3</sup> Factory preset settings are The U.S.A. and Canada: SMPTE-C, Others: EBU.

# **FUNCTION**

Sub menu	Settings	Explanation
FUNCTION 5	<hv delay=""> <autosetup> <blue only=""> <blue only=""> <gamma select=""> <sd aspect=""> <scan> <sub window=""> <wfm> <marker> <pixel pixel="" to=""> <pixel pos.=""> <level meter=""> <mono> <undef>   (Factory preset settings FUNCTION1: MARKER FUNCTION2: WFM FUNCTION3: LEVEL METER FUNCTION4: PIXEL TO PIXEL FUNCTION5: PIXEL POS.)</undef></mono></level></pixel></pixel></marker></wfm></sub></scan></sd></gamma></blue></blue></autosetup></hv>	Used to select the functions to be assigned to individual buttons [FUNCTION1] to [FUNCTION5] (front-panel buttons). <hv delay=""> Displays the synchronizing signal (horizontal, vertical). The display is switched in the following order.  DELAY OFF → V DELAY → H DELAY → HV DELAY → DELAY OFF <autosetup> Used to automatically adjust the PC display.  <blue only=""> Used to cut the red and green signals. You can check the hue (PHASE) and depth of color (CHROMA). This is switched between ON/OFF by pushing the button.  <gamma select=""> Used to display the gamma curve. The display changes in the following order.  GAMMA STANDARD → GAMMA FILM → GAMMA STANDARD  <sd aspect=""> Used to switch between "16:9" and "4:3".*1  <scan> You can switch between "UNDER SCAN" and "NORMAL SCAN".*1  <sub window=""> You can perform the settings for 2 screen display mode.*1 The display changes in the following order.  SINGLE → FULL/PART→ STILL→ SINGLE  <wfm> Used to display the wave form monitor.  <marker> Used to switch the marker on and off.  <pixel pixel="" to=""> Used to switch the display between the input size and display size.  <pixel pixel="" to=""> Used to switch the display position when PIXEL TO PIXEL is on.  <evel meter=""> Used to switch the AUDIOMETER display. The display changes in the following order.  METER 8CH → METER 4CH → METER 2CH → OFF→ METER 8CH → METER 8CH → METER 4CH → METER 2CH → OFF→ METER 8CH   MONO&gt; Used to switch the display between color and black-and-white.  UNDEF&gt; No settings</evel></pixel></pixel></marker></wfm></sub></scan></sd></gamma></blue></autosetup></hv>
FUNCTION DISPLAY	<on> <off></off></on>	Used to make display settings for the functions assigned to individual buttons [FUNCTION1] to [FUNCTION5] (front-panel buttons). <on> The selected function is displayed.  <off> The selected function is not displayed.</off></on>

<sup>\*1</sup> If these settings are changed, the menu settings will also change.

#### ■ Restrictions on various FUNCTION settings

Under the following conditions, various settings are disabled.

Setting	Disabling condition
HV DELAY	In SUB WINDOW, WFM or PIXEL TO PIXEL mode, "INVALID FUNCTION" is displayed and the setting is disabled.  When "YPBPR/RGB" set in "INPUT SELECT" menu is "RGB-COMP.", "INVALID FUNCTION" is displayed and the setting is disabled.
AUTO SETUP	When "YPBPR/RGB" set in "INPUT SELECT" menu is other than "RGB-COMP.", "NOT RGB-COMP. CH" is displayed and the setting is disabled.  When "YPBPR/RGB" set in "INPUT SELECT" menu is "RGB-COMP." and there is NO SIGNAL, "INCOMPLETE" is displayed and the setting is disabled.
GAMMA SELECT	When GPI item is set, "INVALID FUNCTION" is displayed and the setting is disabled.  When "YPBPR/RGB" set in "INPUT SELECT" menu is "RGB-COMP.", "INVALID FUNCTION" is displayed and the setting is disabled.
SD ASPECT	When GPI item is set, "INVALID FUNCTION" is displayed and the setting is disabled.  When SUB WINDOW (still picture) or HD display (including PIXEL TO PIXEL) is on, "INVALID FUNCTION" is displayed and the setting is disabled.
SCAN	When GPI item is set, "INVALID FUNCTION" is displayed and the setting is disabled. In SUB WINDOW or PIXEL TO PIXEL mode, "INVALID FUNCTION" is displayed and the setting is disabled.
SUB WINDOW	When "YPBPR/RGB" set in "INPUT SELECT" menu is other than "RGB-COMP.", "INVALID FUNCTION" is displayed and the setting is disabled.  When "RGB-COMP." is selected in SUB WINDOW with a motion picture on, the screen turns SINGLE. When an item other than "RGB-COMP." is selected, two motion pictures are displayed on the screen. When a still picture is on, blackout occurs.
WFM	In SUB WINDOW or PIXEL TO PIXEL mode, "INVALID FUNCTION" is displayed and the setting is disabled.  When "YPBPR/RGB" set in "INPUT SELECT" menu is "RGB-COMP." or "RGB-VIDEO", "INVALID FUNCTION" is displayed and the setting is disabled.
MARKER	When "YPBPR/RGB" set in "INPUT SELECT" menu is "RGB-COMP.", "INVALID FUNCTION" is displayed and the setting is disabled.  When GPI item is set or in SUB WINDOW mode, "INVALID FUNCTION" is displayed and the setting is disabled.
PIXEL TO PIXEL	When "YPBPR/RGB" set in "INPUT SELECT" menu is "RGB-COMP." or "RGB-VIDEO", "INVALID FUNCTION" is displayed and the setting is disabled.  In SUB WINDOW mode, "INVALID FUNCTION" is displayed and the setting is disabled.
PIXEL POS.	When PIXEL TO PIXEL is OFF, "PIXEL TO PIXEL OFF" is displayed and the setting is disabled. When PIXEL TO PIXEL is 720P display, the position becomes CENTER. When the display position is not CENTER in PIXEL TO PIXEL mode during 1080P display and the 720P signal is selected, the display position moves to CENTER.
MONO	When GPI item is set, "INVALID FUNCTION" is displayed and the setting is disabled.

# ■ Operation items displayed when a FUNCTION button is used

When any of the buttons, [FUNCTION1] to [FUNCTION5], is pressed, the following messages are displayed according to the operation assigned to the pressed button.

#### • HV DELAY

DELAY OFF, V DELAY, H DELAY, HV DELAY

#### AUTOSETUP

COMPLETE: Display for completion INCOMPLETE: Display for incompletion NOT RGB-COMP. CH

#### • GAMMA SELECT

GAMMA STANDARD, GAMMA FILM, GAMMA STDIO/PST

#### • SCAN

NORMAL SCAN, UNDER SCAN

# SUB WINDOW

SINGLE, FULL/PART, STILL

#### MARKER

MAKER OFF, 4:3 MARKER, 13:9 MARKER, 14:9 MARKER, VISTA MARKER, CNSCO MARKER, 95% MARKER, 93% MARKER, 90% MARKER, 88% MARKER, 80% MARKER

#### PIXEL TO PIXEL/PIXEL POSITION

CENTER, LEFT TOP, LEFT BOTTOM, RIGHT TOP, RIGHT BOTTOM PIXEL TO PIXEL OFF

#### • LEVEL METER

METER OFF, METER 2CH, METER 4CH, METER 8CH

# ■ About HV DELAY

This displays the video blanking period. By pushing the button, you can switch through the H blanking display  $\rightarrow$  V blanking display  $\rightarrow$  no blanking display.

#### ■ About the SUB WINDOW

You can compare saved still and moving images by using the "SUB WINDOW" function to separate the main window into 2 displays as shown below.

Depending on the settings of the "SUB WINDOW" (FULL, PART) in the "SYSTEM CONFIG" menu (→ page 21) it can be switched as shown below.

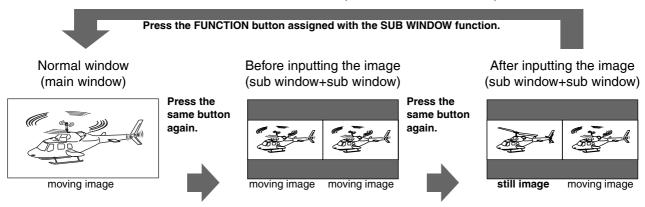
The display changes each time you press one of the buttons, [FUNCTION1] to [FUNCTION5] (→ page 22), assigned with the [SUB WINDOW] function. (To use the "SUB WINDOW" function, you must assign it to one of the [FUNCTION1] to [FUNCTION5] buttons.)

When setting "I-P MODE" function (→ page 19),

- 1)change the setting after releasing "SUB WINDOW" function.
- 2)we recommand "MODE2" for the image with a fast movement.

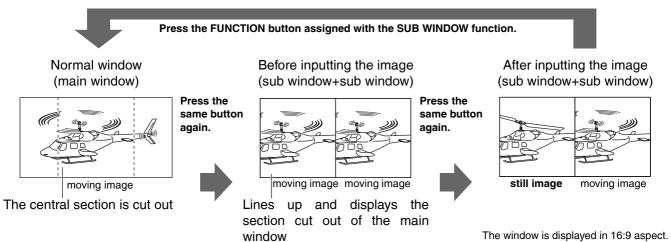
#### • FULL

The main window is reduced and made into 2 sub window (sub window+sub window).



#### • PART

Only the sub window size is cut out of the main window, and the cut section is made into 2 sub window images (sub window+sub window).



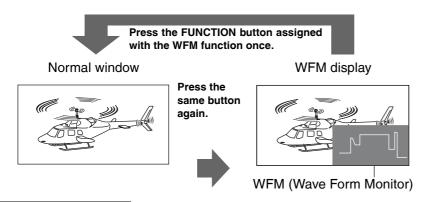
#### Precautions when selecting FULL/PART

This function compares screens with the same input terminal and same format. If different input formats, or if signals are input between different input channels, the sub-window (left side, still image) becomes blurred and blanking occurs. However, if the same format signals are input into the input terminal when acquiring the still image, the images will be displayed correctly.

#### ■ About WFM

You can display the wave form monitor using the "WFM" function.

The display changes each time you press one of the buttons, [FUNCTION1] to [FUNCTION5] (→ page 22), assigned with the [WFM] function (To use the "WFM" function, you must assign it to one of the [FUNCTION1] to [FUNCTION5] buttons).



The window is displayed in 16:9 aspect.

## Restrictions on WFM

Even if "WFM" has turned ON", "WFM" is not displayed when using the "PIXEL TO PIXEL" function, "YPBPR/RGB" set in "INPUT SELECT" menu is "RGB-COMP." or "RGB-VIDEO", or using the "SUB WINDOW" function.

#### ■ About PIXEL TO PIXEL and PIXEL POS.

Using the "PIXEL TO PIXEL" function, you can confirm a picture with the actual pixel count (only when the input is an HD signal).

First, press one of the buttons, [FUNCTION1] to [FUNCTION5] (→ page 22), assigned with the "PIXEL TO PIXEL" function to turn it "ON". With the function on, press another one of the buttons, [FUNCTION1] to [FUNCTION5] (→ page 22), assigned with "PIXEL POS.". Each time the button assigned with "PIXEL POS." is pressed, the signal display position switches. (To use the "PIXEL TO PIXEL" function, "PIXEL TO PIXEL" and "PIXEL POS." must be assigned to any two of the buttons, [FUNCTION1] to [FUNCTION5].)

Sub menu	Settings	Explanation	
PIXEL TO PIXEL*1*2	<off> <on></on></off>	Used to set the input signal size as the display size. Compatible formats 1080/60I/59I/50I/30P/29P/25P/24P/23P/24PsF/23PsF, 720/60P/59P/50P(SDI/YPBPR)	
PIXEL POS.	<pre><center> <left top=""> <right top=""> <right bottom=""> <left bottom=""></left></right></right></left></center></pre>	Used to set the is on.*3 <center> <lt> <rt> <rb> <lb></lb></rb></rt></lt></center>	center top left top right bottom right bottom left

<sup>\*1</sup> When PIXEL TO PIXEL is on, the following menu settings become invalid:

<sup>&</sup>quot;ON" for "ANAMO" and "UNDER" for "SCAN" set in "VIDEO CONFIG"

Various "HV DELAY" settings in "FUNCTION"

<sup>&</sup>quot;MARKER display"

<sup>\*2</sup> When the input signal is "SDI1", "SDI2" or "YP<sub>B</sub>P<sub>R</sub>", the setting takes effect. However, 1080/60P and 1080/50P signals are excluded.

<sup>\*3</sup> When the input signal format is 720, only CENTER is displayed.

# GPI

The "GPI CONTROL" item is used to set enable/disenable of all GPI functions, and assigns functions to each of the GPI terminal pins (→ page 30).

The underlined values are factory preset setting values.

Sub menu	Settings	Explanation
GPI CONTROL	<a href="mailto:self-align: center;">&lt; ENABLE&gt;</a>	GPI functions enable/disenable settings
GPI1-GPI8	<pre> <undef> <marker1 off="" on=""> <marker2 off="" on=""> <marker backhalf=""> <marker backblack=""> <center marker=""> <input sel.="" video=""/> <input sdi1="" sel.=""/> <input sdi2="" sel.=""/> <input rgb="" sel.="" ypbpr=""/> <sd aspect=""> <scan> <r-tally> <mono> <gamma film="" sel.=""> <gamma pst="" sel.="" stdio=""> <rob sync=""></rob></gamma></gamma></mono></r-tally></scan></sd></center></marker></marker></marker2></marker1></undef></pre>	Used to set the GPI control terminal pin assign. You can set the same items for each terminal (refer to page 30 for details).

#### Note:

Please be aware that the following can not be performed.

- "SD ASPECT" operation when input signal is HD or PC
- "SCAN" operation when the input signal is PC
- "GAMMA SELECT" operation when the input signal is PC
- "RGB SYNC" operation when anything other than "RGB-VIDEO" is selected in "YP<sub>B</sub>P<sub>R</sub>/RGB" in the "INPUT SELECT" menu
- "MONO" operation when input signal is PC

# **INPUT SELECT**

The underlined values are factory preset setting values.

Sub menu	Settings	Explanation
VIDEO / Y/C	<auto> <ntsc> <pal></pal></ntsc></auto>	Used to select the input format for VIDEO and Y/C input. *1 <auto> Either NTSC or PAL is automatically selected.  <ntsc> NTSC <pal> PAL</pal></ntsc></auto>
NTSC SETUP	<75> <00>	Selects the NTSC setup level.  <75> Select this when using with a setup signal of 7.5 IRE. (The inner parts of the monitor are set to the 7.5 IRE setup level to suit the black level)  <00> Select this when there is no setup level signal.
YP <sub>B</sub> P <sub>R</sub> /RGB	<ypbpr≥ <rgb-video> <rgb-comp.></rgb-comp.></rgb-video></ypbpr≥ 	Selects either YP <sub>B</sub> P <sub>R</sub> (Component) or RGB input mode. <yp<sub>BP<sub>R</sub>&gt; Selects the YP<sub>B</sub>P<sub>R</sub> signal.  <rgb-video> Selects the video RGB signal.  <rgb-comp.> Selects the PC RGB signal.</rgb-comp.></rgb-video></yp<sub>
COMPONENT LEVEL	< <u><smpte></smpte></u> <b75><b00></b00></b75>	Selects YPBPR (Component) signal input level. <smpte> When the signal level specified in SMPTE is  Chroma 100 IRE PB, PR = 0.7 Vp-p.  <b75> Select this when connecting a betacam or  simliar devices set to 7.5 IRE. (The inner parts  of the monitor are set at 7.5 IRE setup level to  suit the black level)  <b00> Select this when connecting a betacam or similar</b00></b75></smpte>
RGB SYNC	<g-on> <ext></ext></g-on>	devices that are not setup to the IRE level.  Selects the SYNC when using RGB-VIDEO input. <g-on> Select when a synchronizing signal is superimposed on the G signal.</g-on>
СОМР.	▼	<ext> Select when an external synchronizing signal is received in synchronization. Performs analog PC settings. (Refer to "COMP." below)</ext>

<sup>\*1 &</sup>quot;AUTO" is set when the monitor is shipped from the factory, but if there are concerns about noise etc. from outside the input signal, we recommend assigning specific format.

#### ■ COMP

The following menus are switched by selecting "RGB-COMP." in "YPBPR/RGB" in the "INPUT SELECT" menu.

The underlined values are factory preset setting values.

Sub menu	Settings	Explanation
AUTOSETUP*1		Screen automatic adjustment is performed when "RGB-COMP." is selected in "YPBPR/RGB" in the "INPUT SELECT" menu. "AUTOSETUP" is performed if a different screen is displayed, and "YES" is selected.
H POSITION	<0-60> (Factory preset setting: 30)	Used to adjust the picture display position in the horizontal direction. *2
V POSITION	<0-60> (Factory preset setting: 30)	Used to adjust the picture display position in the vertical direction. *2
PHASE	<0-31> (Factory preset settings: → page 28)	Used to adjust the clock phase with 1/32 clock phases. *2
CLOCK	<700–1800> (Factory preset settings: → page 28)	Used to adjust the sampling clock in dot units. *2
WXGA/XGA	<xga> <wxga></wxga></xga>	Switches between WXGA and XGA.

<sup>\*1 &</sup>quot;EXECUTING" is displayed while "AUTOSETUP" is being executed, and "COMPLETE" is displayed when "AUTOSETUP" is completed. If "AUTOSETUP" cannot be completed, "INCOMPLETE" is displayed.

<sup>\*2</sup> Each "RGB-COMP." input compatible format can be adjusted, but you cannot load ("SETUP LOAD" → page 21) or save ("SETUP SAVE" → page 21) the user data.

# ■ "PHASE" and "CLOCK" factory preset setting values

FORMAT	CLOCK	PHASE	FORMAT	CLOCK	PHASE
640x400(70Hz)	800	18	1024x768(60Hz)	1344	1
640x480(60Hz)	800	18	1024x768(70Hz)	1328	21
640x480(75Hz)	840	10	1024x768(75Hz)	1312	9
640x480(85Hz)	832	5	1024x768(85Hz)	1376	9
800x600(60Hz)	1056	27	1280x768(60Hz)	1728	1
800x600(75Hz)	1056	7	1280x768(75Hz)	1712	22
800x600(85Hz)	1048	24	1280x1024(60Hz)	1688	12

# **AUDIO**

Adjusting the speaker output.

Sub menu	Settings	Explanation
INPUT SELECT	<a href="mailto:substance;">&lt; AUTO&gt;</a> <a href="mailto:substance;">&lt; ANALOG&gt;</a>	Used to select speaker output. <auto> When SDI input line is selected with [INPUT SELECT] on the front panel:  embedded audio (SDI terminal)  When an input line other than SDI1 and SDI2 is selected with [INPUT SELECT] on the front panel:  analog (AUDIO input terminal)  <analog> Analog (AUDIO input terminal)</analog></auto>
EMBEDDED SELECT L	<ch1-ch8> (Factory preset setting: CH1)</ch1-ch8>	Used to select the audio channel of the embedded audio outputted to the left speaker.
EMBEDDED SELECT R	<ch1-ch8> (Factory preset setting: CH2)</ch1-ch8>	Used to select the audio channel of the embedded audio outputted to the right speaker.
METER*1	<0FF> <8CH> <4CH> <2CH>	Used to select the embedded audio meter for on-screen display.
0dB POINT	<on> <off></off></on>	Used to switch the 0 dB line displayed on the meter on and off.
СН	<on> <off></off></on>	Used to switch the channel displayed on the meter on and off.

<sup>\*1</sup> When speaker output set in "INPUT SELECT" menu is analog, the level meter does not move regardless of its display status.

# CONTROL

The underlined values are factory preset setting values.

Sub menu	Settings	Explanation
CONTROL	<local> <remote></remote></local>	Used to select the operation. (Combined control lock) <local> Front operation enabled <remote> Remote operation enabled (The front controls become locked)<sup>*1</sup></remote></local>
LOCAL ENA.*2	< <u>OIS.&gt;</u> <input/>	When "REMOTE" is selected in "CONTROL", this selects whether front controls are enabled/disenabled. <dis.> All front operations are disabled.  <input/> All controls except for the [INPUT SELECT] button and volume knob are disabled.</dis.>

<sup>\*1</sup> The menu can be displayed when the lock is engaged.

The only menu setting that can be changed when the lock is engaged is the "CONTROL/LOCAL ENA." item. When the lock is engaged, the picture adjusting knob is disabled.

Operations when the lock is engaged follow the settings in "LOCAL ENA.".

When the lock is engaged, the volume knob can be operated ( $\rightarrow$  page 9, 6).

When the lock is engaged, the key mark is displayed on the screen.



\*2 This is only enabled when "CONTROL" is set to "REMOTE".

# HOURMETER

Sub menu	Settings	Explanation
OPERATION	<xxh>*3</xxh>	Used to display the power distribution time.
LCD	<xxh>*3</xxh>	Used to display the backlight activation time.
FAN	<xxh>*3</xxh>	Used to display the FAN operation time.*4

<sup>\*3</sup> Time is displayed in "XX".

<sup>\*4</sup> Linked with the FAN MOTOR ON/OFF status.